UNIVERSITY OF COPENHAGEN

# Review of "Fungible Life: Experiment in the Asian City of Life", by Aihwa Ong, Durham: Duke University Press, 2016.

Wahlberg, Ayo

*Published in:*
Theory, Culture & Society

*Publication date:*
2018

*Document version*
Peer reviewed version

*Document license:*
Other

*Citation for published version (APA):*
Wahlberg, A. (2018). Review of "Fungible Life: Experiment in the Asian City of Life", by Aihwa Ong, Durham: Duke University Press, 2016. *Theory, Culture & Society*. https://www.theoryculturesociety.org/review-of-ong-fungible-life-experiment-in-the-asian-city-of-life/

Download date: 05. May. 2023

Review of *Fungible Life: Experiment in the Asian City of Life*, by Aihwa Ong, Durham: Duke University Press, 2016, ISBN 978-0822-36-264-7, pp. 284

by Ayo Wahlberg, Department of Anthropology, University of Copenhagen

In *Fungible Life: Experiment in the Asian City of Life*, Aihwa Ong picks up from where she and Nancy Chen had left off in their 2010 co-edited volume *Asian Biotech: Ethics and Communities of Fate* (Duke University Press). For Ong and Chen, Asian Biotech was a "configuration of common interests and imagination" that had emerged in the 2000s as countries like South Korea, Japan and China became global life science nations. In the intervening years, Ong set out to empirically track how such an Asian life science configuration was actively shaping the Singaporean state's efforts to turn their island into a Biopolis.

The book is based on interviews with life scientists, research institution managers as well as government officials as Ong charts Singapore's particular version of scientific entrepreneurialism. Much like Iceland in the 1990s, Singapore has attracted significant social scientific attention for its highly publicised strategy to become a global hub for life sciences research in the new millennium. Among others, Michael Fischer (2013), Catherine Waldby (2009), David Reubi (2010) and Charis Thompson (2010) have each provided their analyses of the specific form that biomedical research has taken in Singapore in the 2000s. Ong's is the first monograph-length analysis of the birth of Biopolis and in it she posits that "pluripotency and fungibility in Singaporean genomics operate through the reassembling of existing forms of racialization and racial accounting in the nation's official classification of its citizenry" (p. 13). As such, in contrast to Iceland's claims to genetic homogeneity, it was exactly the historically contingent composition of Singapore's citizenry (made up of Chinese, Malay, Indian as well as other groups) that made it an ideal site for Asian life science.

The book is divided into three parts titled "Risks", "Uncertainties" and "Known Unknowns", each focusing on the particularities of Asian genomes and diseases, the conditions of working as a scientist in Singapore and the carving out of Asia-relevant life science respectively. Throughout the book, Western life science features as the always present Other of Asian life science with all the post-colonial implications such a dichotomy insists upon. Indeed, so much so that it is tempting to read *Fungible Life* as much as an account of the making of national science – akin to the work that has been done on the making of Asian medicines such as Chinese

medicine or Vietnamese medicine (Taylor 2005; Wahlberg 2014) – as it is an account of how a particular version of Asian life science has emerged in Singapore, complete with its own logics of fungibility.

In the section on "Risks", Ong argues that Biopolis scientists have set out to correlate DNA variants, ethnicities and diseases in ways that allow them to make life science research relevant to the citizens of Singapore and on account of its Asia-ethnically-diverse population to Asia in general. If there are particular DNA variants that are more common in Asia and if Asian populations have their epidemiological specificities, then Asian life science should direct its energies at understanding these specificities with a view to developing genetic tests, treatments (whether pharmaceutical or cell-based) and vaccines that address these specificities. The point being that Asian bodies are at risk in distinct ways and for a science to be Asian it must orient itself to identifying biomarkers of Asian risk which can then be used to hopefully reduce morbidity and mortality.

One of the post-colonial tensions that continues to run through the Biopolis project concerns the Singapore government's strategy of attracting "superstar scientists". In the section on "Uncertainties", Ong shows how becoming a global life science hub requires more than investments into the spatial hardware of biomedical research in the form of buildings and scientific equipment. Also needed are career opportunities and working conditions that would make Biopolis an attractive place to work. There is a considerable expatriate population working in Singapore, also in the field of life sciences, which (much like elsewhere) is not without its challenges. Ong maps out some of the difficulties faced by both "foreign lab workers" and "local science talent" as they compete for positions as well as possibilities for career advancement. As always, junior level scientists who are hired on fixed term contracts are the most vulnerable and as Ong chronicles through her interviews with them, they very often feel marginalised even if they have chosen to work in the 'emerging' field of biomedicine. The uncertainties of genomics are mirrored in the uncertainties of their career opportunities.

In the third and final section on "Known Unknowns", we are given three case studies of frontier Asian life science in the fields of population genetics, virus research and the search for an 'athlete gene'. The latter chapter sees Ong leave the island state of Singapore for a visit to Shenzhen to interview BGI scientists. Once again, these three chapters show how life scientists in Asia make a point of grounding genomic research around questions and problems that are specifically relevant for Asia. For example, the use of population genetics to promote a form of Pan-Asianism based on the hypothesis that Asia was populated through a 'single wave' arrival of early modern humans.

When anthropology and science studies meet they often do so as a matter of methodology. That is to say, through the mobilisation of ethnography in efforts to map out and track processes of knowledge production, whether in the lab, in the clinic or beyond. In *Fungible Life*, it is anthropology's comparative imperative that is brought to bear on the making of life science at Biopolis. Asian life science is different from Western life science, Ong argues, because "[b]iological sciences in emerging sites are perforce oriented less toward self-optimization [as they are in the West] than technologies for managing uncertainties that threaten in ways large and small the collective interests of life and living in the region" (p.12). This question of what makes life science Asian can be both empirical and a matter of theorisation. Taken as an empirical question, the challenge is to find out how 'Asian life science' is emically mobilised and articulated by those persons and institutions involved in its development. As noted earlier, such an approach has been pursued by a number of scholars of medicine in Asia who have shown how the qualification of a medicine as Chinese, Korean, Vietnamese or Tibetan is always intimately tied to nation-building processes. Taking it as a theoretical question, on the other hand, requires identifying and accounting for qualitative differences in the cultural logics and forms that comprise an Asian version of life science. On balance, it is the latter approach that Ong has pursued, as she has sought to account for a different kind of life science when compared to, as she puts it, "Venter-esque" genomics. Asian life science, especially in Singapore, is very much a state science where scientists are civil servants but it is also, Ong suggests, based on an "'Asian' system of biosocial values and valuation" (p.15).

Given Singapore's position as an Asian hub – geographically, demographically, financially as well as logistically – it is certainly convincing that a specifically Asian form of life science is being crafted in Biopolis, as Ong shows us through the series of case studies that make up *Fungible Life*. Nonetheless, if we are to understand whether that life science is qualitatively different from Western life science we would need more in depth ethnographic insights from within the laboratories where those scientists Ong has interviewed work. We do not learn much about how genomes, genes, genetic variations or viruses are conceived and deployed in Singaporean life science research. Moreover, by bringing in BGI (Beijing Genomics Institute, based in Shenzen) in the final chapter of the book, we are left wondering what kinds of differences between various national forms of life science in Asia currently persist. Life science in China – shaped by its history, educational system, economy, demographics, politics, culture and more – is different from the life science that is performed at Biopolis in important ways. For example, Joy

Zhang (2012) has shown how stem cell science in China has been cosmopolitized in recent decades with implications for the ways in which research groups are organized at Chinese universities and how stem cell science is practiced. It is these particularities of life science practices in the lab that *Fungible Life* is missing, and as such readers are left unsure of to what extent an Asian life science has formed in Singapore. Asia's growing STS community throughout the region is ensuring that we gain important insights into these differences as well.

Ayo Wahlberg

Department of Anthropology, University of Copenhagen

**References**

Fischer, M. (2013) "Biopolis: Asian Science in the Global Circuitry". Science, Technology, and Society, 18(3):381-406.

Reubi, D. (2010). Blood donors, development and modernisation: Configurations of biological sociality and citizenship in post-colonial Singapore. Citizenship studies, 14(5), 473-493.

Thompson, C. (2010). "Asian Regeneration? Nationalism and Internationalism in Stem Cell Research in South Korea and Singapore" in A. Ong, & N. N. Chen (Eds.) Asian biotech: Ethics and communities of fate. Durham: Duke University Press, pp. 95-117

Taylor, Kim (2005). Chinese Medicine in Early Communist China, 1945-63: A Medicine of Revolution, London: Routledge.

Wahlberg, A. (2014). Herbs, Laboratories, and Revolution: On the Making of a National Medicine in Vietnam. East Asian Science, Technology and Society, 8(1), 43-56.

Waldby, C. (2009). Singapore Biopolis: Bare life in the city-state. East Asian Science, Technology and Society, 3(2-3), 367-383.

Zhang, J. (2012). The Cosmopolitanization of Science: Stem Cell Governance in China. London: Palgrave Macmillan